Community Mental Health Journal, Vol. 36, No. 2, April 2000

Consumers' and Case Managers' Perceptions of Mental Health and Community Support Service Needs

Dushka Crane-Ross, Ph.D.
Dee Roth, M.A.
Betsy G. Lauber, M.A.

ABSTRACT: Consumers with serious and persistent mental illness (N = 385) and their case managers rated the amount of help needed and the amount of help received with mental health and community support services. Consumers also identified their primary source of help with each type of need. Results highlighted areas of agreement and disagreement between consumers' and case managers' perceptions. Consumers' reports revealed a strong reliance on sources of support outside the mental health system (e.g., family and friends) for many community support service needs, interpersonal needs, and crisis-related needs. In general, correlations between consumers' and case managers' ratings of help needed and help received were low. Consumers perceived the majority of their needs to be unmet; case managers perceived the majority of consumer needs to be overly met. Discussion focuses on the importance of increasing consensus between consumers and case managers regarding needs by including consumers in treatment planning and providing them with more information about available services. It is recommended that researchers and evaluators examine perceptions of help needed, help received, and sources of help when assessing service needs.

The prominent role of case managers in treatment planning and service delivery has become evident amid ongoing changes in the public mental health system. With the shift of public mental health care from

The authors are grateful to Michael Hogan, Ph.D., and Ron Ross, Ph.D. for their valuable comments. This study was supported, in part, by the National Institute of Mental Health Grant MH46348.

Dushka Crane-Ross, Dee Roth, and Betsy Lauber are affiliated with the Office of Program Evaluation and Research, Ohio Department of Mental Health.

Address correspondence to Dushka Crane-Ross, Office of Program Evaluation and Research, Ohio Department of Mental Health, 30 East Broad Street, Columbus, 43266-0414.

hospital to community settings, case managers have taken on the responsibility of linking clients to a wider array of basic services and addressing continuity of care in a complex system. With transitions in funding mechanisms, case managers have sought to balance consumers' needs with considerations such as cost effectiveness and the availability of resources. Case managers have become the primary point of contact between individual clients and the service system that provides for their needs.

Though case managers possess professional experience and knowledge of the mental health system that may allow them to select efficient and effective services for their clients, their opinions may not be reflective of their clients' viewpoints. There has been increasing awareness that consumers' perspectives are often excluded from the needs assessment and service provision processes (Ridgeway, 1988). The problem is exacerbated by increasing caseloads and administrative tasks (Hromco, Lyons, & Nikkel, 1997) that leave little time for case managers to gain a full understanding of the unique circumstances and perspectives of their clients. As in many states, case managers in Ohio average only monthly contact with the majority of their clients with serious and persistent mental illness (Roth, Crane-Ross, Hannon, Cusick, & Doklovic, 1998). As a result, factors such as case management style, level of education, and agency philosophy are likely to have considerable influence on the types of services and activities performed by case managers (Hromco et al., 1997). The individual consumer perspective is likely to have a limited influence, despite expressed support for consumer empowerment.

The importance of building consensus with consumers regarding their use of services has been recognized by many mental health professionals and clients (Ridgeway, 1988) and reported by a number of researchers (Anthony, Cohen, & Farkas, 1990; Maddy, Carpinello, Holohean, & Veysey, 1991; Rogers, Danley, Anthony, Martin, & Walsh, 1994). Services that accommodate consumers' preferences are more likely to be perceived as relevant and responsive than services that are externally imposed. As a result, they are less likely to be rejected (Morrissey & Dennis, 1986; Ridgeway, 1988; Rosenheck & Lam, 1997). Client involvement in decision-making is an important component of the rehabilitative process because of its role in increasing self-efficacy, self-responsibility, and coping responses (Ridgeway, 1988). Furthermore, services based on clients' perceptions of needs are more likely to be individualized, a factor that has been associated with better outcomes (Limoli, Quane,

Johnsen, & Torigoe, 1996; Test, 1981). Thus, client involvement in the selection of services may have implications for both participation in treatment as well as rehabilitative outcomes.

Becoming aware of patterns of consumer and case manager disagreement about consumers' needs is a natural starting point from which service providers can work to increase consensus. Unfortunately, there is little research in this area to guide those in the service system. The authors of this paper found only four studies in which consumers' and service providers' perceptions regarding consumers' service needs were compared (Lynch & Kruzich, 1986; Maddy, Carpinello, Holohean, & Veysey, 1991; Rosenheck & Lam, 1997; Wilson, 1990). Only two of these studies matched responses of consumers with those of their service providers (Rosenheck & Lam, 1997; Wilson, 1990), thus permitting assessment of the level of agreement between the two perspectives. All four studies focused on consumers' and case managers' perceptions of services needed, but none included perceptions of the amount of service received. That is, none of the studies examined whether needs were viewed as met by current levels of service or identified areas in which services may be inadequate. Furthermore, these studies did not provide information about the sources of assistance for consumers' needs. Thus, these studies did not address specific areas in which current service levels may be inadequate, and they did not provide an accurate account of the extent to which consumers rely upon the mental health system as opposed to other sources of assistance, such as family members, friends, or other systems of support. Such information is needed to clarify the precise implications of consumer/case manager disagreement.

The primary purpose of this study was to compare consumers' and case managers' perceptions of the levels of unmet and "overly met" need by obtaining ratings of the amount of help needed and the amount of help received in various areas. By examining both need and service receipt, it was possible to further our understanding of the differences between consumers' and case managers' perceptions of the adequacy of levels of service. The second purpose was to identify sources of help for consumers' needs, thus determining the extent to which consumers rely on formal and informal sources of help.

It was expected that case managers' assessments of need would be dependent upon their understanding of the mental health system, including the efficacy and availability of services, their case management style, and their level of knowledge of the specific circumstances of their individual clients. In contrast, consumers' assessments of needs were

hypothesized to be dependent on their individual circumstances, and their level of understanding of the mental health system. Due to the differing factors that influence each perspective, it was expected that consensus with regard to levels of met or unmet need would be low. Two previous studies reported correlation coefficients between consumers' and providers' assessments of need in the .02 to .40 range (Rosenheck & Lam, 1997; Wilson, 1990).

Differences were also expected in the types of needs considered unmet by consumers and case managers. Results of several studies (Lynch & Kruzich, 1986; Maddy et al., 1991; Rosenheck & Lam, 1997; Wilson, 1990), suggested that consumers are more likely to focus on community support and daily living needs, while service providers are more likely to focus on needs for mental health services, psychotropic medications and social skills development. Thus, it was expected that consumers would report more unmet need with regard to medical and dental services, vocational services, and basic needs such as housing and financial assistance. Case managers were expected to report more unmet need with regard to mental health services, medication management, and social and interpersonal issues.

Sources of assistance for consumers' needs were expected to vary by type of need. Family members and friends have been identified as important sources of help for many consumer needs, particularly housing, transportation, and daily living tasks (e.g., food preparation, personal hygiene) (Campbell & Schraiber, 1989; Francell, Conn, & Gray, 1988; Skinner, Steinwachs, & Kasper, 1992). Thus, we expected informal sources of support to play a primary role in assisting consumers with their interpersonal and community support needs (e.g., making friends, transportation). The mental health agency was expected to play a greater role in assisting consumers with needs pertaining to traditional mental health services (e.g., talking about problems and obtaining and managing medication).

A third area of focus in our study was on individual differences in consumers' needs, sources of support, and the concordance between consumers' and case managers' perceptions. We sought to determine whether individual differences on these measures were related to demographic variables (gender, age, ethnicity) or psychiatric diagnosis. In addition, we sought to determine whether the concordance between consumers' and case managers' ratings was related to characteristics of their service relationship. One might expect concordance to be higher among consumers and case managers who have frequent contact and a long-standing relationship.

METHODS

This study was part of a larger statewide longitudinal study of mental health services, needs, and outcomes among consumers with severe mental disabilities in Ohio (see Roth et al., 1998). The study was conducted by the Ohio Department of Mental Health and included four waves of measurement, spanning a period of five years (1991, 1992, 1993, and 1995).

Participants

Participants were mental health consumers and their case managers. The original sample included 418 consumer case manager dyads. Retention rates at time 2, 3, and 4 were 92% (N = 385), 84% (N = 351), and 71% (N = 297), respectively. Attrition was not related to demographic characteristics, clinical status, level of need, or level of help received. The participants were drawn from four mental health board areas in Ohio and were selected to represent the cultural and geographic characteristics of the state. The sites included one small urban board area on the eastern border, one small rural area in the northwest, one large urban board area in the southwest, and one large rural board area in the Southern/Appalachian region of the state. The sample was stratified in the two urban areas to include a representative proportion of African American consumers.

All consumer participants were certified as having severe mental disabilities (SMD). The state criteria for SMD certification are based on diagnosis, duration of illness, and functional impairment (Bean, Townsend, Champney, & Garrett, 1988). Primary diagnoses reported by case managers included schizophrenia or other psychoses (49%), mood disorders (24%), personality disorders (3%), anxiety disorders (2%), and other diagnoses (6%); diagnostic information was not reported for 17% of the participants. Eighty-five percent of participants had been prescribed one or more classes of psychotropic medication. Scores on the Global Assessment of Functioning scale (APA, 1994) suggested that 6% of consumers experienced no symptoms or transient symptoms with good functioning overall, 38% experienced minimal to mild symptoms, 24% experienced moderate symptoms and were generally functioning with some difficulty, 27% experienced serious symptomatology or major impairment in several areas, and 6% were considered to be unable to function in almost all areas.

Fifty-seven percent of the participants were women; 43% were men. Seventy-seven percent of the participants were European American; 20% were African American, and 2% were of other racial backgrounds, including Hispanic, Asian American, and Native American. Ages ranged from 19 to 87 years ($M = 45.81, SD = 13.57$, median = 44). Thirty-nine percent of the participants had not completed high school. Median monthly income was $440 (M = $532.18, SD = $323.13). Only 25% of the participants reported that they were employed or doing volunteer work; 17% reported salary or wages as a source of income. These demographic and clinical characteristics were similar to the population of adult consumers with SMD in the Ohio public mental health system.

Procedures

Each consumer was interviewed by a trained field interviewer at each measurement interval. Interviews were approximately one to one-and-one-half hours in duration and included questions about consumers' service receipt, needs, relationships, and outcomes. Participants were informed that the study was being conducted by the Ohio Department of Mental Health and that the information gained by the study would be used to better help individuals with mental health problems. The majority of interviews took place

in consumers' homes. In order to maintain confidentiality, family members, friends, or other individuals were not permitted to be present during interviews, unless requested by the consumer. Case managers completed a questionnaire pertaining to participants' level of functioning, symptomatology, needs and services.

Needs Assessment

The complete needs survey was introduced in the second year of the study, and questions pertaining to sources of help were introduced in the last year of the study. Therefore, this report includes results from the last three intervals of measurement. These three time-points, in which needs were measured, will be labeled time one, time two, and time three.

Questions pertaining to consumer needs were created to assess two overall areas: daily living needs and needs associated with the delivery of Community Support Program services. Specific needs were identified by reviewing the Uniform Client Data Instrument (NIMH, 1978) and the Vermont Housing Project survey instrument (Livingston, Gordon, King, & Srebnik, 1991). Fifteen areas of need were selected (see Table 1). Respondents were asked to rate the total amount of help needed, regardless of the amount of help received. Next, respondents were asked to rate the total amount of help received, including assistance received from informal sources, such as family members and friends. The response options were 0 (no help needed/received), 1 (a little help needed/received), 2 (some help needed/received), 3 (quite a bit of help needed/received), and 4 (complete help needed/received). Ratings of help received were subtracted from ratings of help needed to determine the level of *met* need. Scores ranged from –4 (no help needed, complete help received) to 4 (complete help needed, no help received). Positive values indicated unmet needs; negative values indicated overly met needs. In order to assess sources of help for consumers' needs, consumers were asked to identify "who helps the most" with each need type. Responses were classified into one of the following categories: mental health service provider, family member, friend, other, or no one.

Analysis

Ratings of help needed, help received, and met need were examined using nonparametric statistics, because these scales were ordinal and some response distributions were skewed (t ranged from .04 to 11.9). The comparison of consumers' and case managers' perceptions of needs was completed using two types of analyses. Spearman's rank-order correlation coefficients (Siegel & Castellan, 1988) were used to assess the relationship between consumers' and case managers' ratings of help needed, help received, and met need. In order to further clarify the discrepancies between consumers' and case managers' ratings, mean ratings were compared using Wilcoxon Matched-Pairs Tests (Siegel & Castellan, 1988). Primary sources of support were identified by examining the proportions of consumers' responses in each source category.

Demographic and clinical differences in consumers' and case managers' ratings of met needs were examined using the Mann Whitney U Test (Siegel & Castellan, 1988) for gender (men versus women) and ethnicity (European American versus ethnic minority), and the Kruskal-Wallis 1-Way Anova Test (Siegel & Castellan, 1988) for age (18–29, 30–44, 45–64, > 65) and diagnostic grouping (schizophrenia, depression, other). Chi-square analyses were used to determine whether sources of support were related to gender, ethnicity, age, or diagnostic group.

Demographic, clinical, and service-related differences in the level of agreement between consumers' and case managers' ratings of help needed, help received, and met

TABLE 1

Consumers' and Case Managers' Ratings of Help Needed

Type of Need	*Consumer*	*Case Manager*	*Spearman r*	*Wilcoxon Z*
Complaining about services/treatment	1.10 (1.35)	1.07 (1.19)	.03	.28
Daily living skills	.96 (.86)	1.59 (1.37)	.35***	–8.65***
Dealing with upsets & crises	1.83 (1.41)	2.53 (1.09)	.21***	–7.48***
Employment, skills training, & education	1.41 (1.54)	1.26 (1.46)	.27***	1.58
Finding and keeping housing	1.05 (1.42)	1.05 (1.41)	.23***	–.45
Finding available services	1.72 (1.45)	1.77 (1.15)	.08	–.38
Issues re. family, friends, & roommates	1.06 (1.27)	1.95 (1.20)	.11*	–8.76***
Legal issues	1.28 (1.51)	1.13 (1.38)	.15**	1.87
Making friends	1.00 (1.36)	1.44 (1.19)	.13*	–4.27***
Managing medication	.80 (1.36)	1.70 (1.37)	.20***	–8.89***
Managing money	1.13 (1.47)	1.79 (1.50)	.26***	–6.53***
Medical & dental	1.70 (1.59)	1.0 (1.35)	.10	.73
Obtaining benefits & income support	1.28 (1.50)	1.44 (1.39)	.11*	–1.51
Talking about problems	1.74 (1.45)	2.19 (1.09)	.13*	–4.67***
Transportation	2.05 (1.64)	1.91 (1.54)	.44***	2.22*

Note. Table values represent means (and standard deviations), correlations, and related sample comparisons of consumers' and case managers' ratings of help needed. Response options were as follows: 0 (no help needed), 1 (a little help needed), 2 (some help needed), 3 (quite a bit of help needed), and 4 (complete help needed).
*$p < .05$
** $p < .001$
*** $p < .0001$

need were assessed using Fisher's z transformation to make comparisons between independent rs (Cohen & Cohen, 1983). Comparisons were based on gender, ethnicity (European American versus ethnic minority), age (18–29, 30–44, 45–64, ≥ 65), diagnostic grouping (schizophrenia versus other diagnoses), frequency of contact with case manager (≥once a week versus < once a week), and length of time with the same case manager (≤ one year versus > one year).

Summary statistics pertaining to help needed, help received, and met need are based on time one, when the sample was least affected by participant attrition; however, analyses were performed on all three times of measurement, to explore fully the longitudinal data. Differences are noted when significant. The results were similar across time-points, with few exceptions. Results pertaining to sources of help are based on time three, when this measure was introduced.

Demographic, diagnostic, and service-related differences were less consistent over time; however, some patterns were discernible. In order to highlight the most reliable differences and to further simplify the results presentation, this report will include only those differences that were consistent across time.

RESULTS

Help Needed and Help Received

Consumers' and case managers' mean ratings of help needed and help received are reported in Tables 1 and 2. Correlations between consumers' and case managers' ratings of help needed and help received were significant in the majority of areas; however, the magnitudes of these correlations were low overall, ranging from $r = -.03$, for help needed complaining about services, to $r = .48$, for help received managing money. Correlations between consumers' and case managers' ratings reached the level of significance in 12 of 15 areas of help needed and 6 of 15 areas of help received. According to results based on paired comparisons, case managers reported that their clients needed greater amounts of help than their clients reported in 7 of the 15 need areas (Wilcoxon Matched Pairs Test, $Z = 2.22$ to 8.89, $p < .05$). Case managers also reported greater amounts of help received than their clients did in 10 of the 15 need areas (9 of 15 areas at time 3) (Wilcoxon Matched Pairs Test, $Z = 3.48$ to 7.83, $p < .05$).

Ratings of help received were subtracted from ratings of help needed to estimate the extent to which needs were met (Table 3). Correlations between consumers' and case managers' ratings of met need were low ($r = -.08$ to $r = .13$) and insignificant in all but one area: daily living skills, $r = .13$, $p < .05$. The low correlations were likely due, in part, to the fact that met needs were calculated by subtracting ratings of help received from ratings of help needed, thus compounding the error variance of these ratings.

TABLE 2

Consumers' and Case Managers' Ratings of Help Received

Type of Need	*Consumer*	*Case Manager*	*Spearman r*	*Wilcoxon Z*
Complaining about services/treatment	.81 (1.19)	1.16 (1.24)	.08	–3.46***
Daily living skills[a]	1.19 (1.03)	1.66 (1.38)	.45***	–6.83***
Dealing with upsets & crises	1.71 (1.37)	2.51 (1.08)	.09	–7.83***
Employment, skills training & education	.77 (1.22)	.88 (1.25)	.30***	–.88
Finding and keeping housing	1.05 (1.39)	1.11 (1.43)	.18**	–.15
Finding available services	1.19 (1.28)	1.96 (1.20)	.08	–7.17***
Issues re. family, friends, & roommates	.94 (1.24)	1.74 (1.16)	.08	–7.36***
Legal issues	.92 (1.34)	1.09 (1.35)	.10	–1.30
Making friends	.60 (1.06)	1.07 (1.10)	.07	–5.26***
Managing medication	1.05 (1.47)	1.80 (1.42)	.34***	–7.51***
Managing money	1.33 (1.52)	1.78 (1.52)	.48***	–4.98***
Medical & dental	1.67 (1.57)	1.88 (1.36)	.10	–1.91
Obtaining benefits & income support	1.10 (1.42)	1.48 (1.40)	.09	–3.48***
Talking about problems	1.57 (1.40)	2.28 (1.10)	.07	–6.36***
Transportation	1.90 (1.51)	1.97 (1.51)	.41***	–.30

Note. Table values represent means (and standard deviations), correlations, and related sample comparisons of consumers' and case managers' ratings of help received. Response options were as follows: 0 (no help received), 1 (a little help received), 2 (some help received), 3 (quite a bit of help received), and 4 (complete help received).

[a]Consumers' and case managers' ratings of help received with daily living skills differed significantly at time 1 and time 2, but not time 3.

*$p < .05$

** $p < .001$

*** $p < .0001$

TABLE 3

Consumers' and Case Managers' Ratings of Met Need

Type of Need	*Consumer*	*Case Manager*	*Spearman r*	*Wilcoxon Z*
Complaining about services/treatment	.28 (1.28)	–.10 (.66)	–.08	–4.27***
Daily living skills	–.12 (.64)	–.05 (.82)	.13*	.96
Dealing with upsets & crises	.13 (1.32)	.01 (.68)	.04	–1.63
Employment, skills training, & education	.64 (1.51)	.35 (1.10)	.10	–2.64**
Finding and keeping housing	–.02 (1.44)	–.08 (.69)	–.07	–.14
Finding available services	.52 (1.63)	–.22 (.68)	–.04	–6.52***
Issues re. family, friends, & roommates	.12 (1.14)	.20 (.82)	.03	1.23
Legal issues	.34 (1.36)	.00 (.63)	.03	–3.81***
Making friends	.40 (1.44)	.30 (.92)	.04	1.66
Managing medication[a]	–.25 (1.16)	–.10 (.69)	–.06	2.14*
Managing money	–.20 (1.47)	.02 (.81)	.01	2.44*
Medical & dental	.02 (1.73)	–.05 (.51)	.03	–.77
Obtaining benefits & income support	.18 (1.36)	–.06 (.59)	–.07	–2.14*
Talking about problems	.17 (1.57)	–.10 (.80)	.03	–2.09*
Transportation	.16 (1.37)	–.03 (.59)	–.02	–2.46*

Note. Table values represent means (and standard deviations), correlations, and related sample comparisons of consumers' and case managers' ratings of met need. Met need scores were calculated by subtracting ratings of help received from ratings of help needed. Possible scores ranged from –4 (no help needed, complete help received) to 4 (complete help needed, no help received).
[a]At time 2 significant differences were not found in consumers' and case managers' ratings of unmet need for managing medication.)
* $p < .05$
** $p < .001$
*** $p < .0001$

Paired comparisons of consumers' and case managers' ratings revealed significant differences in ratings of met needs. Compared to their case managers' ratings, consumers were more likely to report unmet needs for help with finding available services ($Z = 6.52$, $p < .001$), complaining about services ($Z = 4.27$, $p < .001$), obtaining benefits and income support ($Z = 2.14$, $p < .05$), employment, skills training, and education ($Z = 2.64$, $p < .001$), transportation ($Z = 2.46$, $p < .05$), legal issues ($Z = 3.81$, $p < .001$), and talking about problems ($Z = 2.09$, $p < .05$). In contrast, case managers were more likely to report that their clients had unmet needs for assistance with managing money ($Z = 2.44$, $p < .05$) and managing medication ($Z = 2.14$, $p < .05$). (At time 2 significant differences were not found in consumers' and case managers' ratings of met need for managing medication.)

Sources of Help

The proportions of consumers identifying each source of assistance for various needs are reported in Table 4. The proportion of consumers who reported receiving no assistance ranged from 23% for dealing with upsets and crises to 68% for vocational services. Among those consumers who reported receiving any help, the majority indicated that mental health service providers were the primary sources of help for finding available services, talking about problems, getting medication, obtaining benefits and income support, complaining about services or treatment, and employment, skills training, and education. Family members were considered the primary sources of help for daily living skills, dealing with upsets and crises, transportation, managing money, issues involving family, friends, and roommates, finding and keeping housing, and legal issues. Friends were considered the primary sources of assistance with making friends and "others" were considered the primary sources of assistance with managing medication and getting medical and dental care (sources most often cited in this category included group home and nursing home staff).

Individual Differences in Consumers' and Case Managers' Ratings

In order to highlight the most reliable demographic, diagnostic, and service relationship differences, the following description is limited to those areas of need in which the findings were consistent over time. Gender, age, and diagnostic differences were found in ratings of need, service receipt, and met need. No consistent demographic, diagnostic,

TABLE 4

Sources of Help for Consumers Needs

	Primary Source of Help				
Type of Need	*M.H. Staff*	*Family*	*Friends*	*Others*	*No one*
Complaining about services/treated	12%	7%	3%	4%	65%
Daily living skills	5%	32%	7%	16%	35%
Dealing with upsets and crises	24%	30%	10%	13%	23%
Employment, skills training, and education	11%	5%	2%	7%	68%
Finding and keeping housing	12%	14%	1%	5%	59%
Finding available services	29%	8%	2%	8%	45%
Issues re. family, friends, or roommates	13%	20%	6%	10%	51%
Legal issues	7%	14%	1%	11%	66%
Making friends	6%	7%	10%	6%	48%
Managing medication	9%	10%	2%	15%	64%
Managing money	9%	27%	2%	7%	55%
Medical and dental	9%	17%	1%	22%	42%
Obtaining benefits and income support	16%	15%	2%	12%	55%
Talking about problems	27%	17%	7%	9%	40%
Transportation	18%	29%	8%	14%	31%

Note. Table values represent proportions of consumers identifying primary sources of assistance in each category. Other sources primarily included groups home staff and nursing home staff.

or service relationship differences were observed with regard to the level of concordance between consumers' and case managers' ratings. No consistent differences were found with regard to ethnicity.

Gender Differences. In each year, case managers rated men as needing more assistance than women with employment, skills training, education ($Z = -3.82$, $p < .01$), managing medication ($Z = -3.25$, $p < .01$) and managing money ($Z = -3.09$, $p < .01$). Men rated themselves as receiving more assistance than women in these areas ($Z = -3.50$; $Z = -2.48$; $Z = 2.98$, respectively); however, they did not report *needing* more assistance than women.

Age Differences. In each year of the study, case managers indicated that their younger clients (age groups 18–29 and 30–44) needed and received more assistance than older clients with employment, skills training, and education (help needed: $X^2(3) = 39.12$; help received: $X^2(3) = 29.50$, $p < .0001$). Younger consumers reported needing and receiving more assistance with employment, skills training, and education (help needed: $X^2(3) = 39.57$; help received: $X^2(3) = 23.13$, $p < .0001$) and managing money (help needed: $X^2(3) = 29.46$, $p < .0001$; help received: $X^2(3) = 12.99$, $p < .01$). In addition, younger consumers were more likely to report unmet needs for assistance with employment, skills training, and education ($X^2(3) = 8.78$, $p < .05$).

Differences by Diagnosis. Case managers reported that consumers with schizophrenia had greater needs for, and received more assistance with, medical and dental care (help needed: $X^2(3) = 8.85$, $p < .05$; help received: $X^2(3) = 6.86$, $p < .05$) and managing medications (help needed: $X^2(3) = 25.83$, $p < .001$; help received: $X^2(3) = 19.67$, $p < .001$). Individuals with schizophrenia did not report needing more assistance than consumers with other diagnoses; however, they did report receiving more assistance in two areas (finding available services: $X^2(3) = 20.56$, $p < .001$; managing money: $X^2(3) = 13.25$, $p < .001$).

Individual Differences in Sources of Support

Few significant demographic or diagnostic differences were found in the sources of support identified by consumers. Specifically, women were more likely than men to identify family as a primary source of help for transportation needs ($\chi^2(3)=8.78$, $p<.05$). Consumers in younger age groups (18–64 years) were more likely than older consumers (≥65) to

identify family as a source of support for daily living needs ($\chi^2(1)=8.41$, $p<.005$) and transportation needs ($\chi^2(1)=8.38$, $p<.005$). Individuals with schizophrenia, compared to individuals with other diagnoses, were more likely to identify the mental health agency and less likely to identify family as the primary source of assistance getting medications ($\chi^2(3)=13.41$, $p<.05$).

DISCUSSION

The results of the current study highlight the degree and nature of disparities between consumers' and their case managers' perceptions of consumers' needs. In addition, they provide information from two perspectives about areas of need where current levels of support are inadequate. Examination of the differences in perspectives of need and identification of formal and informal sources of support may facilitate the development of better practices for assessing service needs and building consensus between consumers and case managers.

The level of concordance between the two perspectives was very low overall, suggesting that consumers' and their case managers' perceptions are, in many respects, unrelated to one another. Based on the number of significant correlations, there was more agreement between consumers and case managers about the level of help needed than about the level of help received. Demographic, diagnostic, and service characteristics did not play a role in determining the level of concordance in ratings.

Overall, case managers perceived consumers as needing more assistance than consumers perceived themselves as needing. However, case managers also perceived consumers as *receiving* more assistance than consumers perceived themselves as receiving. As a result, case managers viewed the majority of consumer needs as overly met, while consumers viewed the majority of their needs to be unmet.

Consumers focused on a wider variety of needs than did their case managers. Consumers reported approximately equal levels of need for community support services (i.e., transportation, medical/dental care), mental health services (i.e., dealing with upsets and crises, talking about problems), and identifying available services. In contrast, case managers attributed relatively high levels of need to a narrow range of issues related to traditional mental health services, medication management, and interpersonal issues. The lack of attention by case managers to community support needs may be related to the fact that consum-

ers rely on sources outside of the mental health system to fulfill the majority of these needs.

Consumers and case managers identified vocational services as the highest ranking unmet need, particularly for younger consumers. Only 32% of consumers reported receiving any assistance with employment, skills training, or education. The majority of those receiving assistance were men, although men and women perceived themselves as having equivalent levels of need for vocational assistance.

Finding out about available services was the second greatest unmet need identified by consumers, though this need was considered overly met by case managers. The lack of agreement was amplified by the fact that mental health staff were viewed as the primary sources of help in this area. Forty-five percent of consumers reported receiving no assistance finding available services.

Both consumers and case managers indicated that more assistance was needed to build and improve consumers' social support networks (making friends, dealing with issues involving family, friends, and roommates). In addition, these informal supports were viewed as primary sources of help for many consumer needs, including community support service needs (daily living skills, transportation, housing, legal issues), interpersonal needs (issues involving family, friends, and roommates, and making friends), and crisis-related needs. However, family members were less likely to be a source of support among consumers with a diagnosis of schizophrenia, and more likely to by a source of support among women and younger consumers.

Case managers viewed clients with a primary diagnosis of schizophrenia and male clients to be in greater need of assistance in a variety of areas, although these views were not shared by their clients. In particular, case managers perceived individuals with schizophrenia to be in greater need for help than individuals with other diagnoses with managing medication and obtaining medical and dental care. Men were perceived as needing more assistance than women with managing medication, managing money, and vocational services.

The addition of service receipt measures to the traditional service need measures reported in the literature, made possible the identification of areas where levels of services met or exceeded levels of need. In the current study and in previously reported studies (Lynch & Kruzich, 1986; Maddy et al., 1991; Rosenheck & Lam, 1997) traditional mental health services were viewed by service providers as an area of great need. However, case managers in the current study viewed service receipt in this area to equal or exceed need. They did not perceive a shortage of

service in this area. Similarly, consumers attributed high levels of need to medical and dental care, but level of unmet need in this area was very low, indicating that this need had been met, for the most part.

IMPLICATIONS

The current study highlighted the importance of including the perspectives of both case managers and consumers in the needs assessment and service provision process. Service providers' perceptions simply do not reflect consumers' views of their needs and services. A great challenge to service providers is to develop better methods of increasing consensus regarding service needs and the adequacy of services, while attending to resource limitations. This will require that consumers and case managers communicate about their differing perceptions of need, the effectiveness of various services, and service options that are available. Case managers attempts to increase consensus may be strengthened by gathering more information about the individual circumstances of their clients, including the current supports available to them.

Consumers would benefit if case managers increased attention to their needs for a wider range of community support services (e.g., legal, employment, benefits and income support, transportation, medical and dental care, housing). The need for these services became more evident following deinstitutionalization. Results of the current study suggest that case managers recognize that clients need substantial assistance with community support services; however, they believe that current levels of service exceed need in most areas, suggesting that providers may be overestimating the effectiveness of their services. Service providers may increase consensus by obtaining more feedback from their clients about the extent to which services are meeting their needs.

The results also suggest that clients would benefit from more information about the mental health system and treatment options available to them. Services that were once available in hospitals must be sought from a variety of different agencies, each with its own potential obstacles to access (locations, hours, style, etc). Consumers need more assistance navigating this complex service system and finding appropriate services. Feeling empowered with regard to one's services is not possible without this knowledge.

Fulfilling vocational needs is a critical task for community care systems (e.g., Van Dongen, 1996). Although both consumers and case managers identified vocational services as an unmet need, the lack of signifi-

cant correlation between their ratings calls for efforts to identify and increase vocational services that will meet clients' needs. In addition, the findings suggest that more attention should be directed at the vocational needs of women with SMD.

The current study adds to the literature implicating social support as an important factor in coping with stress and remaining in the community (Beels, 1981; Hammer, 1981; Marsella & Snyder, 1981). Informal supports were found to be the primary source of help for many community support needs, and both consumers and case managers identified a need for additional assistance strengthening relationships with family, friends, and roommates. Thus, assistance that case managers provide to facilitate supportive relationships within the community will be instrumental in satisfying consumers' needs. In addition, treatment planning can be strengthened by assessment of the level of support provided by informal sources. Results suggested that individuals with schizophrenia, men, and older individuals are most vulnerable to a lack of informal supports.

Though concordance was unrelated to the longevity of the consumer-case manager relationship, or frequency of contact, other aspects of the consumer-case manager relationship may play a significant role. The lack of concordance may reflect attitudes among service providers regarding the ability of clients to make appropriate choices about their lives. Future research could examine the relationship between service providers' attitudes and the levels of agreement regarding service needs. For instance, the extent to which case managers believe that their clients' viewpoints are important or valid is likely to influence whether they are receptive to client input in treatment planning. Attending to consumers' views will hopefully clarify avenues to consensus and increase the likelihood of positive rehabilitative outcomes. Ultimately, attempts to increase consensus will be enhanced by reorienting treatment philosophy within agencies such that clients are viewed as treatment team leaders as opposed to treatment recipients.

REFERENCES

American Psychiatric Association [APA]. (1994). Diagnostic and statistical manual of mental disorders-IV (DSM-IV) (4th ed.). Washington, DC: Author.

Anthony, W., Cohen, M., and Farkas, M. (1990). *Psychiatric Rehabilitation*. Boston University, Center for Psychiatric Rehabilitation, Boston.

Bean, G..J., Townsend, W., Champney, T.F., and Garrett, J. (1988) An assessment of the reliability and validity of the functioning scales used in the 508 certification process. In D. Roth (Ed.),

New Research in Mental Health (Volume 8, 1986–1987 Biennium, 168–173). Columbus, OH: Ohio Department of Mental Health.

Beels, C.C. (1981). Social support and schizophrenia. *Schizophrenia Bulletin*, *7*, 58–72.

Campbell, J., and Schraiber, R. (1989). *The Well-Being Project: Mental Health Clients Speak for Themselves*. Sacramento, CA: California Department of Mental Health.

Cohen, J., and Cohen, P. (1983). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences (2nd ed.). Hillsdale, NJ: Erlbaum.*

Francell, C.G., Conn, V.S., and Gray, D. P. (1988). Families' perceptions of burden of care for chronic mentally ill relatives. Hospital and Community Psychiatry, 39(12), 1296–1300.

Hammer, M. (1981). Social support, social networks and schizophrenia. *Schizophrenia Bulletin*, *7*, 45–58.

Hromco, J.G., Lyons, J.S., and Nikkel, R.E. (1997). Styles of case management: The philosophy and practice of case managers. *Community Mental Health Journal*, *33*(*5*), 415–428.

Limoli, M., Quane, J., Johnsen, J., and Torigoe, F. (1996). Impact of a community support system for persons with a history of long term psychiatric hospitalization. In D. Roth (Ed.), *New Research in Mental Health* (Volume 12, 1994–1995 Biennium, 43–55). Columbus, OH: Ohio Department of Mental Health.

Livingston, J.A., Gordon, L.R., King, D.A., Srebnik, D.S. (1991). Implementing the Supported Housing Approach: A National Evaluation of NIMH Supported Housing Demonstration Projects (Final Report). Center for Community Change Through Housing and Support. [Department of Psychology, University of Vermont, Burlington, VT 05405]

Lynch, M.M., and Kruzich, J.M. (1986). Needs assessment of the chronically mentally ill: Practitioner and client perspectives. *Administration in Mental Health*, *13*(*4*), 237–248.

Maddy, B.A., Carpinello, S.E., Holohean, E.J., and Veysey, B.M. (1991). Service and residential need: Recipient and clinician perspectives. *Proceedings from the Second Annual National Conference on State Mental Health Agency Services Research and Program Evaluation*, 187–199.

Marsella, A.J., and Snyder, K.K. (1981). Stress, social supports, and schizophrenic disorders: Toward an interaction model. *Schizophrenia Bulletin*, *7*, 152–163.

Morrissey, J., and Dennis, D. (1986). *NIMH-Funded Research Concerning Homeless Mentally Ill Persons: Implications for Policy and Practice*. Albany: New York State Office of Mental Health.

National Institute of Mental Health (1978). *Uniform Client Data Instrument*. Boston: Human Services Research Institute.

Ridgway, P. (1988). *The Voice of Consumers in Mental Health Systems: A Call for Change*. Center for Community Change through Housing and Support. Burlington, VT: University of Vermont.

Rogers, S., Danley, K., Anthony, W., Martin, R., and Walsh, D. (1994). The residential needs and preferences of persons with serious mental illness: A comparison of consumers and family members. *The Journal of Mental Health Administration*, *21*(*1*), 42–51.

Rosenheck, Robert, and Lam, Julie (1997). Homeless mentally ill clients' and providers' perceptions of service needs and clients' use of services. *Psychiatric Services*, *48*(*3*), 381–386.

Roth, D., Crane-Ross, D., Hannon, M., Cusick, G., and Doklovic, S. (1998). Longitudinal study of mental health services and consumer outcomes in a changing system. In D. Roth (Ed.), *New Research in Mental Health* (Volume 13, 1994–1995 Biennium). Columbus, OH: Ohio Department of Mental Health.

Siegel, S., and Castellan, J. Jr. (1988). *Nonparametric Statistics for the Behavioral Sciences* (2nd ed.). New York: McGraw-Hill.

Skinner, E.A., Steinwachs, D.M., and Kasper, J.A. (1992). Family perspectives on the service needs of people with serious and persistent mental illness: Part I: Characteristics of families and consumers. *Innovations and Research*, 1(3), 23–30.

Test, M. (1981). Effective community treatment of the chronically mentally ill: What is necessary? *Journal of Social Issues*, *31*(*3*), 71–86.

Van Dongen, C.J., (1996). Quality of life and self-esteem in working and nonworking persons with mental illness. *Community Mental Health Journal*, *32*(*6*), 535–548.

Wilson, N. (1990). Agreement among clients, collaterals, and clinicians regarding service need and treatment outcomes for chronically mentally ill persons. *Proceedings from the First Annual National Conference on State Mental Health Agency Services Research and Program Evaluation*, 138–141.